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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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EXAMINER

REESE, DAVID C

ART UNIT PAPER NUMBER

3677

DATE MAILED: 04/29/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Application No.

10/777,901

Applicant(s)

HULIN ET AL.

Examiner

David C. Reese

Art Unit

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on Amendment: 3/14/2005.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 2,4,7,8 and 11-26 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 25,26 is/are allowed.
- 6) ☒ Claim(s) 2,4,7,8 and 11-17 is/are rejected.
- 7) ☒ Claim(s) 18-24 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)  | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                                   | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____  |

### DETAILED ACTION

This office action is in response to Applicant's amendment filed 3/14/2005.

#### *Status of Claims*

- [1] Claims 2, 4, 7-8, and 11-26 are pending.

#### *Claim Objections*

- [2] Claim 4 is objected to because of the following informalities: it is dependent upon the canceled claim 3. Examiner assumes that reference is to Claim 7, instead of Claim 3.

Appropriate correction is required.

#### *Claim Rejections - 35 USC § 103*

- [3] The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

- [4] Claims 2, 4, 7-8, and 12-14 are rejected under 35 U.S.C. 103(a) as being unpatentable over Rutsche et al., US-4,936,066, in view of Mitomi, US-4,762,437.

Although the invention is not identically disclosed or described as set forth 35 U.S.C. 102, if the differences between the subject matter sought to be patented and the prior art are such

that the subject matter as a whole would have been obvious at the time the invention was made to a designer having ordinary skill in the art to which said subject matter pertains, the invention is not patentable.

As for Claim 7, Rutsche et al. teaches of a connecting element (1 in Fig. 6) for connecting first (37) and second pieces (35) each comprising a through hole (46, 43) with a predetermined contour, the first (37) and second pieces (35) having respectively first and second predetermined thicknesses, said fastener (1) comprising a head (2) and a body (5), wherein

said head (2) comprises a transverse stop (2) adapted to bear against the first piece (37);

the body (5) comprises first (7 in Fig. 2) and second spacers (5) which are coaxial and disposed in line with each other in an axial direction (Fig. 6), the first spacer (7) being adjacent to the head (5) and having a diameter greater than that of the second spacer (5) which extends starting from the first spacer (7) on the opposite side from the head (5);

each of the spacers comprises at least one lug (outside of 7), the lug on the first spacer (7) being separated from the head (2) by a first distance corresponding substantially to the first thickness of the first piece (37), the lug on the second spacer (17) being separated from the first spacer (7) by a second distance corresponding substantially to the second thickness of the second piece (35), the lug on the first spacer (outside of 7) being aligned with the lug on the second spacer (17);

the transverse stop (2) on the head is a projecting collar (bottom of 2) on the periphery of the head (2);

However, Rutsche et al. fails to disclose expressly that the collar comprises two cut-outs which define an axially movable locking tooth.

Mitomi teaches of an fastener (Fig. 12a) that does express a collar (20) comprising a transverse stop (20) adapted to bear against the first piece wherein the transverse stop (20) on the head is a projecting collar on the periphery of the head and that the collar (20) comprises two cut-outs (below 20) which define an axially movable locking tooth (21).

At the time of invention, it would have been obvious to one of ordinary skill in the art to modify the head of the connecting element as taught by Rutsche et al., to incorporate a axially movable locking tooth as taught by Mitomi, in order to as Mitomi states in column 3, line 60, "Therefore, the fastener is prevented from slipping out from the fixing hole T1 of the body T by an inadvertent turn."

Re: Claim 2, the fastener being made in a single piece (1 of Rutsche et al.).

Re: Claim 4, further comprising a join (4 in Fig. 2 of Rutsche et al.) between the first spacer (7) and the second spacer (5), wherein the join (4) is a frangible region having a diameter smaller than the diameters of the first (7) and second (5) spacers.

Re: Claim 8, wherein a width of the said locking tooth is substantially equal to that of the lug of the first spacer (Note that those of ordinary skill in the art would appreciate that a modification such as a mere change in size of a component would be obvious. A change in size is generally recognized as being within the level of ordinary skill in the art. *In re Rose*, 105 USPQ 237 (CCPA 1955). See also, MPEP § 2144.04 which states: *In re Rinehart*, 531 F.2d 1048, 189 USPQ 143 (CCPA 1976) ("mere scaling up of a prior art process capable of being scaled up, if such were the case, would not establish patentability in a claim to an old process so scaled." 531 F.2d at 1053, 189 USPQ at 148.). In *Gardner v. TEC Systems, Inc.*, 725 F.2d 1338, 220 USPQ 777 (Fed. Cir. 1984), cert. denied, 469 U.S. 830, 225 USPQ 232 (1984), the

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Federal Circuit held that, where the only difference between the prior art and the claims was a recitation of relative dimensions of the claimed device and a device having the claimed relative dimensions would not perform differently than the prior art device, the claimed device was not patentably distinct from the prior art device).

Re: Claim 12, wherein said tooth is angularly spaced, in a circumferential direction of said fastener (21 of Mitomi), about 90 degrees from the lugs of said first (7 of Rutsche et al.) and second spacers (5), and

said tooth (21 of Mitomi) and the lug (outside of 7) of said first spacer (7) are substantially equally spaced from a central axis of said fastener.

Re: Claim 13, wherein said collar has only one said tooth (Note that it has been held that a mere omission of an element and its function in a combination where the remaining elements perform the same functions as before involves only routine skill in the art. *In re Karlson*, 136 USPQ 184) (Thus, in the instant case, the mere fact that the applicant possess a single locking tooth compared to two locking teeth as taught by Mitomi is not given patentable weight), a remainder of said collar extending circumferentially of said fastener without interruption from one of said cut-outs to another.

Re: Claim 14, wherein said tooth (21) has a material thickness greater than a remainder of said collar (the remaining section of 20 above).

[5] Claims 11 is rejected under 35 U.S.C. 103(a) as being unpatentable over Rutsche et al., US-4,936,066, in view of Mitomi, US-4,762,437, and in further view of Denis Villeval et Pierre Trin, FR-2,549,532.

Although the invention is not identically disclosed or described as set forth 35 U.S.C. 102, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a designer having ordinary skill in the art to which said subject matter pertains, the invention is not patentable.

As for Claim 11, Rutsche et al. teaches of the above including:

the first spacer (7) and the second spacer (5) comprises two diametrically opposed said lugs (outsides of both 7 and 5), wherein the lugs on the first spacer are aligned with the lugs on the second spacer (Fig. 2).

However, Rutsche et al. fails to disclose expressly that the head comprises a tongue for manual gripping.

Denis Villeval et Pierre Trin teaches device that possesses tongue (10) on the head (44). Because the given references address the narrow problem of manual gripping, a person seeking to solve that exact same problem would consult the references and apply their teachings together.

### *Claim Rejections - 35 USC § 102*

[6] The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(a) the invention was known or used by others in this country, or patented or described in a printed publication in this or a foreign country, before the invention thereof by the applicant for a patent.

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

(c) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for

patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

[7] Claims 15-17 are rejected under 35 U.S.C. 102(b) as clearly anticipated by Denis Villeval et Pierre Trin, FR-2,549,532, because the invention was patented or described in a printed publication in this or a foreign country, or in public use or on sale in this country more than one (1) year prior to the application for patent in the United States.

As for Claim 15, Denis Villeval et Pierre Trin teaches of a fastener (Fig. 2) comprising a head (44), and an elongated body (22) extending in an axial direction thereof downwardly from said head (44);

said elongated head comprising (44), in said axial direction, a first enlarged portion (20) connected to an underside of said head via a first neck portion (16) and a second enlarged portion (24) connected to said first enlarged portion via a second neck portion (22), “whereby sheet materials having openings can be accommodated around said neck portions between said first enlarged portion and said head and between said first and second enlarged portions”;

each of said enlarged portions (20, 24) having a greater dimension and a smaller dimension respectively in first and second radial directions perpendicular to said axial direction (20 consists of both a greater dimension (top of 20) and a smaller dimension (bottom of 20); as 24 has both a greater dimension, and the area adjacent 24 has a smaller dimension);

wherein the dimensions of said enlarged portions in said first and second radial directions are not greater than respective dimensions of said head in said first and second radial directions (the dimensions of both 20 and 24 are not greater than that of the head 44).



The above statement within quotes is an example of intended use as it does not further limit the structure of the claimed invention. Note that it has been held that a recitation with respect to the manner in which a claimed apparatus is intended to be employed does not differentiate the claimed apparatus from a prior art apparatus satisfying the claimed structural limitations. *Ex parte Masham, 2 USPQ2d 1647 (1987)*.

Re: Claim 16, wherein the dimensions of said second enlarged portion in said first and second radial directions are smaller than the respective dimensions of said first enlarged portion in said first and second radial directions (20 has a greater dimension in both the first and second radial directions than that of 24 and adjacent 24); and

the dimensions of said first enlarged portion in said first and second radial directions are smaller than the respective dimensions of said head in said first and second radial directions (the dimensions 20 is not greater than that of the head 44).

Re: Claim 17, wherein a transverse wall (10) having a central region to which said elongated body (16, 22) is connected; and a collar (44) extending downwardly from a periphery of said transverse wall (10) and obliquely, away from said central region of said transverse wall (10);

wherein said collar (44) comprises two cut-outs (48) which define therebetween an axially movable locking tooth (44).

### ***Response to Arguments***

[8] Applicant arguments filed 3/14/2005 regarding rejections under 35 U.S.C. 103 have been fully considered and are to some degree persuasive. To begin, examiner agrees to some extent with applicant's argument with regard to the locking tooth as presented by Kubogochi et al. For

proper motivation, however, it is not required that the prior art disclose or suggest the properties newly-discovered by an applicant in order for there to be a prima facie case of obviousness. *See In re Dillon*, 919 F.2d 688, 16 USPQ2d 1897, 1905 (Fed. Cir. 1990). Moreover, as long as some motivation or suggestion to combine the references is provided by the prior art taken as a whole, the law does not require that the references be combined for the reasons contemplated by the inventor. *See In re Beattie*, 974 F.2d 1309, 24 USPQ2d 1040 (Fed. Cir. 1992); *In re Kronig*, 539 F.2d 1300, 190 USPQ 425 (CCPA 1976) and *In re Wilder*, 429 F.2d 447, 166 USPQ 545 (CCPA 1970). The test for obviousness is not whether the features of a secondary reference may be bodily incorporated into the structure of the primary reference; nor is it that the claimed invention must be expressly suggested in any one or all of the references. Rather, the test is what the combined teachings of the references would have suggested to those of ordinary skill in the art. *In re Keller*, 642 F. 2d 413, 425, 208 USPQ 871, 881 (CCPA 1981). In this regard, a conclusion of obviousness may be based on common knowledge and common sense of the person of ordinary skill in the art without any specific hint or suggestion in a particular reference. *In re Bozek*, 416 F. 2d 1385, 1390, 163 USPQ 545, 549 (CCPA 1969).

Regardless of the above, the examiner believes that such the locking tooth feature as presented by applicant is better represented by that of Mitomi; as Mitomi does particularly show a locking portion within its collar and states that the purpose of such a locking tooth is to prevent the fastener from slipping out from the fixing hole of the body by an inadvertent turn, emulating the reasoning behind such a feature from the applicant. Consequently, the reasons for motivation are much more clear and apparent. In addition, Mitomi was combined with that of Rutsche et al., because the examiner believes that the device presented by Rutsche et al. is more relevant to the

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invention as claimed by applicant and that it is only missing the locking tooth in the collar which now has a more direct and clear motivation for.

Lastly, after further examination, the examiner believes that the device as presented by Denis Villeval et Pierre Trin, FR-2,549,532; with the most broad claim interpretation, does indeed have features which read onto the claimed invention, as discussed above in claims 15-17 as presented by applicant.

*Allowable Subject Matter*

[9] Claims 18-24 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

As for Claim 18, the prior art, incorporating other corresponding limitations as set forth above, does not teach each of said enlarged portions has a maximum dimension and a minimum dimension respectively in said first and second radial directions which are perpendicular to each other.

Claims 19-24 are all dependent from Claim 18.

[10] Claims 25-26 are allowed.

As for Claim 25, the prior art, incorporating other corresponding limitations as set forth above, does not teach of the exact relationship between the enlarged portions, first and second sheet members, dimensions of said enlarged portions, including that of the first and second radial directions.

Claim 26 is dependent from Claim 25.

*Conclusion*

[11] Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).


A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

[12] Any inquiry concerning this communication or earlier communications from the examiner should be directed to David C. Reese whose telephone number is (571) 272- 7082. The examiner can normally be reached on 7:30 am - 5:00 pm M-Th, and every other Friday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, J.J. Swann can be reached on (571) 272-7075. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Sincerely,  
David Reese  
Examiner  
Art Unit 3677

  
ROBERT J. SANDY  
PRIMARY EXAMINER